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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,170	07/31/2001	Peter John Bonitatebus JR.	RD-29400	9027

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GENERAL ELECTRIC COMPANY
GLOBAL RESEARCH CENTER
PATENT DOCKET RM. 4A59
PO BOX 8, BLDG. K-1 ROSS
NISKAYUNA, NY 12309

EXAMINER

STRICKLAND, JONAS N

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 09/09/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/682,170

Applicant(s)

BONITATEBUS ET AL.

Examiner

Jonas N. Strickland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-86 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-86 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Detailed Action is in response to the request for reconsideration filed on 6/19/03 as Paper No. 5. Claims 1-86 are currently pending. In view of applicant's response, the 35 U.S.C. 102(e) rejection of claims 1-86 as being anticipated by Grade et al. (US Patent 6,410,774 B1) has been withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofori et al. (US Patent 5,981,788) in view of Buysch et al. (US Patent 6,071,843).

Ofori et al. discloses a method for recovering and recycling catalyst constituents. The catalyst materials include palladium compounds, cobalt compounds and bromide sources, such as tetraalkylammonium and hexaalkylguanidinium bromides are removed from organic carbonylation reaction mixtures comprising said materials in combination with diaryl carbonate and hydroxyaromatic compound. The removal steps include extraction with an aqueous complexing solution for palladium, extraction with a non-basic and ionic extractant for cobalt, and extraction with water to remove bromide source. Ofori et al. continues to disclose wherein the steps may be combined into an integrated process (see abstract; col. 3, line 24 – col. 4, line 64). Ofori et al. continues to teach an evaporation step (col. 5, lines 60-67). The catalyst recycled by the method disclosed by Ofori et al. is more active than the carbonylation catalyst composition contained in the first liquid reaction. However, Ofori et al. does not teach wherein the carbonylation catalyst composition is comprised of a Group 4 metal.

Buysch et al. teaches a process for reactivating catalyst systems containing a platinum group metal, which are used in carbonylation processes (see abstract). The catalyst is comprised of at least one platinum metal, a co-catalyst, and other salts. The

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catalysts may comprise palladium, Group 4 metals, which include titanium, as well as a mixture including copper co-catalyst (col. 1, line 65 – col. 2, line 5).

Therefore, it would have been obvious to one of ordinary skill in the art to recycle and reactivate a deactivated carbonylation catalyst composition based on the process as taught by Ofori et al., with the catalyst as taught by Buysch et al., because Buysch et al. teaches where it is known in the art to use a catalyst composition comprised of at least one platinum metal, such as palladium, a Group 4 metal, such as titanium, and a copper source, because Buysch et al. teaches using all of these components in a carbonylation reaction process. Furthermore, it would have been obvious to one of ordinary skill in the art to modify the teachings of Ofori et al., based on the teachings of Buysch et al., because both references are directed towards using methods for reactivating palladium based catalysts used in carbonylation reactions.

Buysch et al. teaches 65 ppm Pd and about 500 ppm Mn, the co-catalyst (col. 3, lines 54-67). Buysch et al. also teaches having nitriles, which are used in an amount of 1 to 1000 parts by weight (col. 3, lines 1-16). With respect to claim 23, see col. 3, lines 54-67).

With respect to claims 31 and 82-84, wherein Applicant recites repeating the steps over and over again, it would have been obvious to one of ordinary skill in the art, because Ofori et al. teaches carrying out the reactivation step in an integrated process and wherein the process may be carried out with multiple extractions and may be continuous.

Response to Arguments

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6. Applicant's arguments with respect to claims 1-86 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonas N. Strickland whose telephone number is 703-306-5692. The examiner can normally be reached on M-TH, 7:30-5:00, off 1st Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0661.


Jonas N. Strickland
September 3, 2003


STANLEY S. SILVERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700